



Oregon APAC-Novel Use of Pediatric Medical Complexity Algorithm

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Collaboration & Acknowledgement

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Pediatric Medical Complexity Algorithm (PMCA)

- Developed by the Seattle Children's Hospital Center of Excellence
- Valid and reliable measure with good sensitivity & specificity
- Used to identify children by level of medical complexity (complex chronic, noncomplex, not chronic)
- 18 different body system conditions (diagnosis codes):

Cardiac	Genetic	Mental Health	Otolaryngologic
Cranium	Genitourinary	Metabolism	Pulmonary-Respiratory
Dermatological	Hematological	Musculoskeletal	Renal
Endocrine	Immunological	Neurological	
Gastric	Malignancy	Ophthalmic	



or

• Any progressive condition (diagnosis codes)

<u>https://www.kpwashingtonresearch.org/our-research/our-scientists/rita-mangione-smith-md-mph/measurement-tools-research-dr-rita-mangione-smith</u>





Opportunity

- Oregon's All Payers All Claims data (APAC) 2011-2018
 - Commercial, Medicaid and Medicare payers
 - Inpatient, outpatient and professional claims
 - Monthly enrollment data (includes people with no claims)
- APAC may improve identification of children with medical complexity who:
 - Move in-out of coverage (uninsured, out-of-state)
 - Move from one insurance type to another
 - Move from one CCO to another







Study Cohorts & Options

- Evaluated multiple models
 - Different time periods: Look back & forward, look back only
 - Different number of years of claims
 - Different age cohorts and age limits
 - Different enrollment requirements



- Abstract: APAC claims 2016-18 (children up to age 18)
- Selected: APAC claims 2017-2019 (children up to 21 enrolled 2019)
- PMCA conservative version
 - Complex chronic (more than 1 condition and more than one visit each or progressive/malignant)
 - Non-complex chronic (1 condition and more than one visit)
 - Non-chronic (no condition or no more than one visit)

PMCA 2016-2018 Claims and Age up to 18





PMCA 2017-2019 Claims and Age in 2019



Discussion & Issues



PMCA scores a bit higher than 2014 publication



APAC has more claims data and more payers



APAC multiple claims for a single 'visit'



No continuous enrollment limitation



Up to 3 year look back

Acknowledgement-Funding



- Lucile Packard Foundation for Children's Health supports work with state policymakers, communities, health care partners and CCOs and using data
- Ford Family Foundation supports data knowledge and use in Douglas, Klamath, Coos and Curry counties and other regions
- COHC supports using data to target best match services
- OHA Transformation Center to provide technical assistance to CCOs

Contact & Information

APAC Website:

https://www.oregon.gov/oha/HPA/ANALYTICS/Pages/All-Payer-All-Claims.aspx

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